JACKPILE PROJECT
PROJECT MANAGEMENT PLAN

Prepared for the
PUEBLO OF LAGUNA

REVISED
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TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

1.0 INTRODUCTION

1.1 Introduction

The Project Management Plan (PMP) is the top level planning document for the project and provides overall managerial, procedural and operational guidance. The PMP is prepared in parallel with overall project planning and thereby documents the baseline project planning process.

This PMP supersedes and replaces the Jackpile Project Management Plan previously prepared and approved for the project.

The following plans are to be made a part of the PMP:

Environmental Monitoring Plan
Health and Safety Plan
Regulatory Compliance Plan
Inspection Plan
Final Waste Pile Slope Design
Soils and Vegetation Evaluation for Final Reclamation
Special Case Designs

These plans are described in Section 9.0 and address specific areas of importance to the project.

1.2 Project Goals and Requirements

The previously established project goals are:

- ensuring public and tribal health and safety,
- providing for the protection of trust resources,
- ensuring that adequate reclamation of the mine site is performed,
- minimizing the financial risks and liability of the POL,
- maximizing employment for members of the POL,
- maximizing the opportunities for training members of the POL to assume technical and managerial positions and responsibilities,
- providing for maximum cooperative control over the project by the POL and the BIA, and
- developing the expertise and resources necessary, including financial resources, for the POL to establish a construction firm capable of conducting other projects with minimal support from non-Pueblo organizations.

The PMP is consistent with these goals. As the Jackpile Project evolves, changes to the PMP may become necessary to maximize the

efficiency of the operations. Any changes should be evaluated against these project goals to ensure the intended focus of the project is not changed.

To accomplish these goals in a cost-effective manner, management procedures must be developed for the following:

o baseline planning,

o annual replanning,

o field replanning,

o work management,

o cost and schedule control,

o financial management,

o quality assurance and control, and

o administrative controls.

These procedures are described in this PMP.

A major portion of the PMP addresses project controls that have been established to guide, monitor, and control critical aspects of the project including cost and schedule control, production reporting, work authorization, and financial management. While the project controls are extensive, every effort has been made to ensure that the project control procedures are not needlessly cumbersome and do not interfere with the efficient operation of the project.

1.3 PMP Organization

Section 2.0 describes the project management structure including the organization, responsibilities, and authority of the project participants.

Section 3.0 describes the project planning and annual replanning procedures and discusses how this process relates to the operational procedures.

Section 4.0 describes the work package management program and the change control procedures.

Section 5.0 describes the cost and schedule control procedures.

Section 6.0 addresses the financial aspects of the POL/LCC contract.

Section 7.0 describes the financial management procedures for the project.

Section 8.0 describes the administrative controls that have been incorporated into the project.

Section 9.0 describes the project operating plans that address key aspects of the project.

Section 10.0 provides additional details on the computer-generated Project Status Report.

2.0 PROJECT MANAGEMENT STRUCTURE

2.1 Organization

The Jackpile Project will be managed by the Pueblo of Laguna (POL) with the Bureau of Indian Affairs (BIA) providing project oversight. The POL activities will be coordinated by the Laguna Reclamation Project Manager (RPM) who will report to the Governor of the Pueblo. A sufficient number of engineering technicians will be employed by the POL to conduct the daily monitoring and inspections, they will report directly to the RPM. Legal counsel will be provided by the POL. Management of the reclamation fund will be performed by the Reclamation Project Manager with the Tribal Treasurer overseeing the management of the fund. The POL may contract with a fund manager for assistance. The BIA activities will be coordinated by the Contracting Officer (CO), the Contracting Officer's Representative (COR), and the Associate Contracting Officers Representative (ACOR) who will be involved with the project on a day-to-day basis. Technical and managerial personnel from the BIA will support the ACOR.

The POL has contracted with Technical Assistance Contractors (TAC) for the preparation of engineering designs and project operating plans.

The POL will contract with various consultants for technical assistance and laboratory work during construction operations.

The POL has formed the Laguna Construction Company (LCC), which will perform the construction operations. The activities of the LCC on the Jackpile Project will be directed by the LCC President and General Manager who will be supported by a Project Manager, Controller, and various other support personnel. The LCC Board of Directors will oversee the management of the LCC by the President and General Manager.

2.2 Responsibilities

The responsibilities of the project participants are listed in Table 2.1 and discussed in Sections 3.0 through 8.0.

In general, it will be the responsibility of the LCC to perform the construction work approved in the Annual Operating Plan. The RPM will perform the day-to-day management of construction activities and validate pay volumes and change orders. The POL will approve all project plans and any budget or schedule variances that exceed established thresholds. The BIA will also approve all project plans and any budget or schedule variances that exceed established thresholds.

TABLE 2. 1
JACKPILE PROJECT TASK RESPONSIBILITIES

PROJECT PLANING	LCC	TAC	SUBCONTRACTOR	POL	BIA
DESIGNS & SPECIFICATIONS	Review	Prepare		Review	Review
				Approve	Approve
SCHEDULE & SEQUENCE	Prepare			Review	Review
				Approve	Approve
COST ESTIMATES AND WORK PACKAGES	Review	Prepare		Review	Review
				Approve	Approve
PROJECT MANAGEMENT PLAN	Review	Prepare		Review	Review
				Approve	Approve
HEALTH & SAFETY PLAN	Review	Prepare		Review	Review
				Approve	Approve
ENVIRONMENTAL MONITORING PLAN	Review	Prepare		Review	Review
				Approve	Approve
CONSTRUCTION INSPECTION PLAN	Review	Prepare		Review	Review
				Approve	Approve
REGULATORY COMPLIANCE PLAN	Review	Prepare		Review	Review
				Approve	Approve
PROJECT STSTUS REPORT				Prepare	Review
LCC TRAINING PROGRAM	Prepare			Review	Review
				Approve	Approve
LCC PERSONNEL MANAGEMENT PLAN	Prepare			Review	Review
LCC IMPLEMENTATION PLAN	Prepare			Review	Review
				Approve	
ANNUAL OPERATING PLAN	Provide data			Prepare	Review
	Review			Approve	Approve
MANAGE RECLAMATION FUND INVESTMENTS				Perform	Review
				Approve	Approve
DEMOLISH BUILDINGS AND STRUCTURES	Perform			Verify	Verify
DECONTAMINATE BUILDINGS	Perform		Verify	Verify	Verify
PLUG UNDERGROUND ENTRIES	Perform			Verify	Verify
BACKFILL PITS	Perform			Verify	Verify
RECONTOUR DUMPS	perform		Verify	Verify	Verify
PLACE COVER	Perform			Verify	Verify
EXCAVATE CONTAMINATED SOIL	Perform		Verify	Verify	Verify
PLACE SOIL	Perform			Verify	Verify
SCALE HIGHWALLS	Perform			Verify	Verify
RIP RAP RIO MOQUINO	Perform			Verify	Verify
CONSTRUCT DITCHES/DROP STRUCTURE	Perform			Verify	Verify
BLAST HIGHWALLS	Supervise		Perform	Verify	Verify
PERFORM SITE SECURITY	Perform				
PROVIDE FIELD SERVICES	Perform				
PERFORM LAND SURVEY	Perform			Verify	
CONSTRUCT/MAINTAIN ROADS	Perform				
REVEGETATE DISTURBED AREAS	Perform			Verify	Verify
GENERAL CONSTRUCTION	Perform			Verify	Verify
HEALTH AND SAFETY TRAINING	Perform		Audit	Review	Review

TABLE 2.1 CONCLUDED

PROJECT PLANNING	LCC	TAC	SUBCONTRACTOR	POL	BIA
RADIOLOGICAL HEALTH TRAINING			Audit	Perform	Review
PAY VOLUMES	Calculate			Check	
				Certify	
CHANGE ORDERS(MINOR)				Issue	
DESIGN FIELD CHANGES	Provide Data			Review	Review
	Perform			Approve	Approve
				Issue	
CHANGE ORDERS/WORK PACKAGES (MAJOR)	Perform			Issue	Review
				Approve	Approve
MONTHLY PROGRESS REPORTS	Provide Data			Prepare	Review
				Issue	
CONTRACTOR Invoices	Provide			Check	
				Approve	
AUDIT PROJECT ACCOUNTING			Perform	Review	Review
				Approve	Approve
ENVIRONMENTAL MONITORING PROGRAM			Perform	Perform	Review
				Review	
				Report	
REGULATORY COMPLIANCE PROGRAM			Perform	Review	Review
				Report	
CONSTRUCTION INSPECTIONS	Report			Perform	Review
PURCHASE/LEASE EARTHMOVING EQUIPMENT	Perform			Approve	Approve
ROUTINE MAINTENANCE OF EQUIPMENT	Perform		Train		
TRAIN EQUIPMENT OPERATORS	Perform		Perform		
REPAIR EQUIPMENT (MAJOR)	Perform		Perform		
SITE PREPARATION	Perform			Review	Review

2.3 Authority

The performance of key aspects of the project must be restricted to the appropriate level of management. Therefore, only approvals by the following personnel or their duly authorized representatives will be considered valid.

1) Approve Designs, Specifications, Work Packages, and Project Operating Plans:

- o Governor as authorized by the Tribal Council, POL
- o Contracting Officer, BIA

2) Approve Annual Operating Plan:

- o Governor as authorized by the Tribal Council, POL
- o Contracting Officer, BIA

3) Accept Management Action Report for costs which exceed quarterly thresholds and approve associated invoices:

- o Reclamation Project Manager, POL
- o Contracting Officer, BIA

4) Accept Management Action Report for costs which exceed annual thresholds and approve associated invoices:

- o Governor as authorized by the Tribal Council, POL
- o Contracting Officer, BIA

5) Authorize approved work package:

- o Laguna Reclamation Project Manager, POL

6) Accept approved work packages:

- o Reclamation Project Manager, POL (for POL work packages)
- o General Manager, LCC (for LCC work packages)

7) Approve and issue a field or engineering change order which is less than $50,000 individually or $400,000 cumulative (please see item number 10):

- o Reclamation Project Manager, POL

8) Accept a field or engineering change order:

- o General Manager, LCC

9) Approve an LCC purchase in excess of $50,000, or change order in excess of $50,000 individually or $400,000 cumulative, or a subcontract in excess of $50,000:

- o Reclamation Project Manager, POL
- o Contracting Officer, BIA

All project participants recognize that their primary goal is to make the project a success and that a cooperative and supportive relationship among all participants is necessary. However, the project participants have different functions and the extensive project oversight structure will result in technical differences and corrective orders. All orders, directives, and requests will be made in accordance with the established line of authority. The employees of each project participant are wholly separate from the employees of all other project participants and no project participant may issue orders or take punitive action against the employee of another project participant.

The POL will direct and manage the project. The RPM will issue day-to-day directives and approvals but major decisions will be made and approved by the Governor as authorized by the Tribal Council as described in this management plan.

The BIA activities will be coordinated by the BIA Associate Contracting Officer's Representative. All required BIA orders, decisions, and approvals will be provided by the Associate Contracting Officer's Representative to the RPM. The BIA Associate Contracting Officer's Representative will obtain all necessary concurrences and approvals from the Contracting Officer, and other BIA employees as required by BIA directives.

The RPM will issue all operational directives to the LCC concerning any issue related to compliance with the Jackpile Project Engineering Designs, Construction Specifications, or any project operating plan.

The LCC will operate as a separate entity, but wholly owned by the POL. The LCC will receive and accept operational directives from the RPM but will operate under contract to the POL. In the event that the RPM and LCC cannot resolve differences over a particular issue the issue will be submitted to arbitration.

3.0 PLANNING

3.1 Project Planning

There are three aspects to planning the Jackpile Project: baseline planning; annual replanning; and field replanning. Baseline planning was performed prior to construction and consists of the preparation of the engineering designs, project operating plans, and work packages, as well as the formation of the LCC. Annual replanning consists of the preparation and approval of the Annual Operating Plan, whereby plans are prepared for the following project year based on the previous year(s) operational experience. Field replanning consists of minor changes to approved plans in response to changes in field conditions. These three aspects to project planning are described on the following pages.

3.2 Baseline Planning

Baseline planning consisted of preparing the fundamental plans for operation of the project. Baseline planning was conducted by the TAC, POL, LCC, BIA and BLM. All baseline plans were reviewed and approved by the POL and BIA. Once the baseline plans are approved, they may not be changed. Replanning activities may result in updated or revised plans and schedules, however, the baseline plans are never changed so project progress can always be compared to the original project plans in terms of costs, schedule, tasks, etc.

The major aspects of baseline planning are described below.

Preparation of engineering designs and specifications

The TAC prepared the baseline engineering designs, specifications, and associated documents necessary to convey an accurate understanding of the activities required to complete the reclamation of the site. The designs are consistent with the EIS and associated ROD, any approved modifications to the ROD, and directives from the POL.

The baseline engineering designs, specifications, and associated documents consisted of:

- o excavation plans and cross sections,
- o grading plans and cross sections,
- o earthwork volume calculations and summaries,
- o appropriate drawings,
- o specifications,

- cost estimates,

- personnel, equipment, supplies, and consumptive volume estimates,

- solicitation documents and

- other relevant information.

Preparation of work packages

The TAC prepared work packages for all tasks associated with reclamation of the site. A work package is a description of a discrete task and is the fundamental tool used to authorize and manage all work associated with reclamation of the site. A work package contains a description of the task, references to appropriate maps and drawings, a schedule and budget, and other relevant information. Section 4.0 describes the work package preparation, authorization, and management procedures.

Preparation of project operating plans

The TAC prepared the following operating plans for key aspects of the project:

- original Project Management Plan,

- Health and Safety Plan,

- Environmental Monitoring Plan,

- Inspection Plan and

- Regulatory Compliance Plan.

Formation of the LCC

The POL formed the LCC. Operational procedures and policies were developed by the LCC Board of Directors and the LCC President and General Manager.

3.3 Annual Replanning

An Annual Operation Plan (AOP) will be prepared each year throughout the construction phase of the project. The preparation of the AOP provides an opportunity for the involved parties to adjust plans based on the previous year(s) operational experience. The first AOP was prepared by the TAC and RPM. Subsequent AOP's will be prepared by the RPM. The procedures for the preparation of the AOP are discussed below.

Annually, the POL and LCC will reevaluate their respective work

packages for the following project year. For example the POL will reevaluate the work packages for the investment and management of the reclamation fund, operation of the RPM office. All work packages are identified in the work breakdown structure. These organizations will prepare proposed adjustments in costs, schedule, personnel, and procedures and will prepare written explanations for the adjustments.

The RPM, BIA, and LCC will meet to discuss any major changes to the baseline work packages. The RPM will prepare the Project Status Reports, which provide the actual costs and schedule status for the previous years, estimates of costs and schedule status for the end of the existing project year and end of the project.

The RPM will assemble the proposed work packages, Project Status Reports and will prepare a description of the previous years' progress and significant issues, as well as the next year's projected progress. These items will be assembled into the AOP, which will be submitted to the POL and BIA for approval. The POL and BIA will have up to sixty days from receipt of the AOP to respond with a written description of areas of concern and additional information needs or the AOP will be automatically approved.

Upon approval, the AOP will be incorporated into the Project Status Reports by the RPM as the working schedule and budget for the following year.

The schedule for preparation and approval of the AOP is very important since the AOP must be in place prior to the beginning of the project year. The following schedule will be followed by all involved parties.

Days Prior To Project Year	Task
120	RPM, and LCC begin to revise work packages.
80	RPM, BIA, and LCC meet to discuss adjustments to work packages.
60	AOP submitted to POL and BIA for approval.
10	AOP is put into Project Status Report, RPM, LCC and BIA meet to discuss AOP.
0	Project year begins.

If the replanning process identifies the need to modify any approved operating plans, the RPM will revise the appropriate plans and they will be submitted to the POL and BIA for approval.

3.4 Field Replanning

When unexpected field conditions are encountered, an adjustment to the project plans must be made quickly to prevent a decrease in production efficiency. These adjustments are called change orders and do not require the revision of the AOP. An example of a change order is repairing the damage done by a major flood to a partially reclaimed area.

There are three types of change orders and each requires a different implementation procedure. These change orders are described below and procedures for processing change orders are described in Section 4.0.

Field change orders

A field change order may be issued by the RPM to perform work which is not included in a work package but is necessary to meet the project designs and specifications and which will cost $10,000 or less to complete. The change order must be prepared by the RPM in writing and issued prior to the commencement of any work. A field change order may be issued by any crew chief or superintendent without prior approval to perform work immediately to correct any immediate and serious hazard to employees, equipment, or Partially reclaimed area.

Engineering change order - minor

An engineering change order is an order to perform work which is not included in a work package but is necessary to meet the designs and specifications. If an engineering change order involves a decrease or increase in expenditures of more than $10,000 but less than $50,000, it is a minor engineering change order. Minor engineering change orders may be approved by the RPM. Prior to approval, the RPM must prepare the appropriate drawings and specifications, and issue a work package.

Engineering change order - major

If an engineering change order involves a decrease or increase in expenditures of $50,000 or more, or involves a change to an approved specification, it is a major engineering change order. Major engineering change orders must be approved by the POL and BIA prior to the commencement of the work (please refer to page 4.0-9). The POL and BIA must act upon the change order within five working days of receipt of the change order. The RPM must prepare the appropriate drawings and specifications (if necessary) and a work package, as well as an explanation of the need for the

change.

The RPM will provide all work directive changes. Work directive changes are explanations or interpretations of drawings, specifications or plans which do not involve an increase or decrease in the project costs. Increases or decreases due solely to increases or decreases in earthwork volumes are not change orders. All such increases or decreases are documented, verified, and recorded for calculation of appropriate progress payments.

4.0 WORK PACKAGE MANAGEMENT

4.1 Introduction

The work performed for the Jackpile Project will be managed with a work package management program. A work package is a description of a discrete task that must be completed for reclamation. The work package is the fundamental tool used to plan, authorize, and manage all work associated with reclamation of the site. The work package contains a description of the task, references to the specifications, a start and completion date, production data (as appropriate), estimated costs, equipment requirements, personnel requirements, a list of prerequisite work packages, and discussion of special health and safety concerns, if any.

In general, a work package describes only one task but may include several directly related subtasks, such as load, haul, and place soil. A work package cannot describe work to be performed by more than one project participant. Separate work packages must be prepared for the activities performed by each company on the same task. Separate work packages are not prepared for very small disassociated tasks (when possible) to prevent administration of the work packages from becoming needlessly burdensome. These tasks are grouped into a single work package.

Baseline work packages were prepared by the TAC for all tasks associated with reclamation of the site. Work packages will be revised annually by the RPM.

4.2 Preparation

Baseline work packages

The initial work packages were prepared by the TAC after the completion of the engineering designs. The TAC prepared work packages for all tasks associated with the reclamation of the site, including tasks to be performed by the POL, LCC, and subcontractors. The POL and BIA reviewed and approve the baseline work packages. These initial work packages were incorporated into the project as the "baseline" work packages. The baseline work packages will not change through the completion of the project. The baseline work package were incorporated into the Project Status Reports to develop the baseline schedule and costs.

The baseline work packages that are scheduled to be performed during the first year of construction activities will be incorporated into the first Annual Operating Plan and into the Project Status Reports as the "working schedule" and costs.

Each year, the work packages will be reviewed and revised (if necessary) as part of the yearly planning process. The procedures for revising the work packages for the Annual Operating Plan are described in Section 3.0. Revised work packages will be incorporated into the Project Status Report to develop the working schedule and costs.

Change orders

New work packages can be prepared by the RPM in response to changes in field conditions. The process for preparing these new work packages is described in section 4.3.

4.3 Authorization and Performance

Authorization

Work packages for a project year are approved through the POL and BIA approval of the AOP. However, the work may not begin until the appropriate officers have authorized and accepted the work package. In general, a work package will not be authorized and accepted until the work is ready to begin. This process allows additional control over the performance of the work and ensures that the work is performed in the correct sequence. The process also allows the organization accepting the work package a formal opportunity to discuss the requirements of the work package. A work package should not be accepted unless it is thoroughly understood and the organization scheduled to perform the work is prepared to do so.

The POL will authorize work packages. Appropriate officers in each organization will accept the work package. Only two officers are authorized to accept work packages; RPM and LCC General Manager.

Performance

Once a work package has been formally authorized and accepted it may be performed in any manner deemed appropriate by the contractor consistent with approved project designs, specifications, and operating plans. The RPM is responsible for immediately notifying the LCC if it observes any construction activities that are not being performed in compliance with the approved designs, specifications, or operating plans. Detailed information concerning inspection of the LCC's performance of the work packages is contained in the Jackpile Project Inspection Plan.

Change procedures

The procedure used to facilitate a change order depends on the cost of the change, which organization will perform the change, and whether or not the change order involves a change to the designs or specifications. In general, minor change orders can be made without prior approval and without preparation of new work packages; major changes require the preparation of new work packages and may require POL and BIA approval; emergency work can be performed at any time; and any change that is not consistent with the designs or specifications requires POL and BIA approval.

The following basic requirements apply to all changes to work packages.

- Once a work package has been authorized, it may not be changed in any way. If the work package no longer substantially describes the work that needs to be performed, the work package may be closed and a new work package may be substituted in its place.

- No work (other than emergencies) may be performed without an approved change order and/or work package.

- A new work package may be issued at any time, as long as the procedures described in Table 4.1 are followed.

- Any LCC superintendent or foreman may authorize work not included in a work package without prior approval to correct an immediate and serious health or safety hazard.

Table 4.1 describes the work packages revision procedures to be followed for each type of change order.

4.4 Completion and Certification

When the LCC completes a work package, the LCC General Manager or Project Manager will sign the request for inspection line of the document of progress and immediately notify the RPM. When the RPM, LCC and BIA have inspected the work and agree that the work has been satisfactorily completed, they will initial the form and the RPM will sign the certification line of the document of progress.

The POL and BIA will make periodic inspections to monitor project progress and to verify the completion of key work packages. Both the POL and BIA will sign the verification line of the work package after verifying that the work package has been satisfactorily completed. Detailed procedures for work package closeout is contained in the Work Package Closeout Procedure Instructions. Detailed information on the inspection of the work is contained in the Jackpile Project Inspection Plan.

TABLE 4.1

SUMMARY OF WORK PACKAGE REVISION
PROCEDURES FOR CHANGE ORDERS

Change 1 AN IMMEDIATE AND SERIOUS HAZARD TO PERSONNEL,EQUIPMENT, OR SITE IS IDENTIFIED.

- o Ordered by foreman or superintendent.
- o LCC performs the work.
- o LCC and RPM technician document the work in the daily field notes.

Change 2 MINOR CHANGES TO EXISTING APPROVED WORK PACKAGES.

- o LCC performs the work.
- o LCC and RPM technician document the work in daily field notes and during monthly production reporting.

Change 3 WORK WHICH IS REQUIRED TO MEET THE PROJECT DESIGNS AND SPECIFICATIONS AND WHICH IS NOT INCLUDED IN AN APPROVED WORK PACKAGE AND WILL COST $25,000 OR LESS TO COMPLETE.

- O RPM issues written change order.
- O LCC performs the work.
- O Work documented in daily field notes.

Change 4 WORK WHICH IS REQUIRED TO MEET THE PROJECT DESIGNS AND SPECIFICATIONS AND WHICH IS NOT INCLUDED IN AN APPROVED WORK PACKAGE AND WILL COST MORE THAN $25,000 AND LESS THAN $100,000.

- O RPM prepares appropriate designs, specifications, and work packages.
- O RPM approves change order and work package.
- O LCC performs the work.
- o Work is documented through the standard Project reporting procedures.

Note: The sum of Change 3 and 4 may not exceed $400,000 in a single year without POL and BIA approval.

TABLE 4.1 (CONTINUED)

Change 5 WORK WHICH IS REQUIRED TO MEET THE PROJECT DESIGNS AND SPECIFICATIONS AND WHICH IS NOT INCLUDED IN AN APPROVED WORK PACKAGE AND WILL COST $100,000 OR MORE TO COMPLETE.

- o RPM prepares appropriate designs, specifications and work package and transmits them to the POL and BIA.
- o POL and BIA approve the work packages or request additional information within five working days.
- o RPM inputs new work package into working costs and schedule.
- o LCC performs the work.
- o Work is documented through the standard project reporting procedures.

Change 6 WORK WHICH IS REQUIRED TO MEET THE PROJECT DESIGNS AND SPECIFICATIONS AND WHICH IS NOT INCLUDED IN AN APPROVED WORK PACKAGE AND WHICH WILL BE PERFORMED BY THE POL.

- o Follow the same process described under Change 5. regardless of cost, except that the POL will perform the work.

5.0 PROJECT STATUS REPORT

5.1 Introduction

The Project Status Report (PSR) consists of a series of procedures to monitor and verify field costs and production to determine equitable pay for contractors. The PSR also includes procedures to analyze field costs and production to identify potential problem areas and maintain an accurate projection of total project costs. This ensures that the project can be completed with the funds available. The system includes procedures for:

- o LCC reporting of field costs and production data by work package,
- o computer analysis of cost and production data by the LCC,
- o reporting of cost and production status to the POL and BIA,
- o payment of contractor invoices by the POL, and
- o reporting, analysis, and corrective action for cost and production problems.

5.2 Field Cost and Production Reporting

Fixed Price Work

The LCC will submit certified actual costs and estimated percent complete data and calculations for each work package to the RPM, on or before the fifth working day of the month for the preceding month's activities.

Percent complete estimates will be based on a system which can be duplicated. The percent complete will be estimated using the following equations:

percent complete = volume placed during month / actual survey volume for work package

or

percent complete = square footage of building demolished / total square footage in work package

or

percent complete = square footage of area revegetated / total square footage in work package

or

other comparable equations where the percent complete is calculated based on the work completed and not on labor or equipment hours or costs expended.

The LCC will submit a labor and equipment report to the RPM each month. The labor report will include actual labor hours and labor costs (including all fringe benefits) and the equipment report will include actual equipment use hours and equipment costs and fuel use and costs.

The RPM will independently calculate percent completes for each work package and resolve any differences with the LCC. At least quarterly the LCC will land survey each work package involving earthwork and will calculate actual percent completes and actual pay volumes. The RPM will annually contract for aerial photography and digitization of the topography, which will be used for a check on volume calculations. The RPM will independently check pay volumes and resolve differences with the LCC.

Force Account Work

The LCC will submit certified payrolls and equipment sheets and other direct costs for each work package involving "force account" work. The LCC will add an approved rate for general and administrative costs and fee to all costs. The RPM will check the LCC costs against the RPM field notes and will resolve any differences. Force account work will primarily be demolition, highwall scaling, and mobilization activities.

At Cost Work:

The same procedures will apply for the "at cost" work package as described above for the force account work with the exception that no fee will be added to the LCC invoice(s). At cost work will primarily be LCC training and LCC set-up costs.

The actual and complete costs of administering and managing the project by the POL will be paid from the reclamation fund on an "at cost" basis.

5.3 Cost Analysis

All work packages and their approved budgets will be entered into the Project Status Report (PSR). Each month the LCC will submit production and actual cost data to the RPM for each authorized work package. The POL will also submit cost data for analysis. The RPM will operate a computer-generated cost and schedule control program. The Project Status Report program will track actual costs and schedule progress against the approved budget. The PSR program will analyze the project in terms of actual costs of the work and variances from the approved budget. The PSR

program will also provide projections of at-completion costs. The PSR program will calculate actual costs for the work performed and will calculate variances for the current month, project year, and total project. The PSR will also project "at completion" variances for the project year and for the end of the project.

A budget control log will be maintained for all approved change orders to ensure that appropriate approvals are obtained when established thresholds are exceeded.

The PSR program will allow costs to be summed and projections made for any summary level work packages. For example, all backfilling work packages can be summed to analyze the efficiency of all backfilling. Likewise, all earthwork work packages can be summed to analyze the efficiency of all earthwork.

Numerous cost and schedule reports will be produced monthly for inclusion into the Monthly Project Status Report, which is described in Section 5.4. Section 10.0 contains a more thorough description of the Project Status Report.

The PSR program will also be used to generate the Annual Cost and Schedule Report, which will be included in the AOP. The Annual Cost and Schedule Report will contain a thorough analysis of the previous operating year's production and cost efficiency for each summary work package and will also contain projections of production and costs for the following year and at the completion of the project.

5.4 Monthly Project Status Report

The RPM will submit a Monthly Project Status Report to the POL and BIA on or before the fifteenth working day of each month.

The report will contain:

- a description of the activities performed on each approved work package,
- percent completion for each authorized work package,
- contractor costs for each authorized work package,
- change control log,
- cost and production analysis reports with period, annual, and at completion variances calculated, and threshold exceedences identified,
- a Management Action Report (if appropriate), and
- a description of any special issues of concern.

The Monthly Project Status Report will be the primary report for the POL management of the project. The POL will review the Monthly Project Status Report thoroughly each month and will make inquires to the RPM on any issues that arise concerning the costs, production, schedule, or quality of the work performed by the LCC. The POL will compare the report to its knowledge of the status of the project to verify the accuracy of the report. Although field notes, records of oral communications, and inspection reports will be maintained by all involved parties, the Monthly Project Status Report will be the instrument which formally documents the status of the project.

5.5 Disbursements

Upon POL verification that the project thresholds have not been exceeded, the invoices of the LCC will be automatically approved for payment. The project thresholds have been established at 10 percent above or below the approved annual budget or 20 percent above or below the approved quarterly budget. If the LCC invoice exceeds these thresholds, the LCC will prepare a Management Action Report which will be submitted with the invoice. The Management Action Report will define which work packages caused the thresholds to be exceeded, the reasons for the exceedence, and the action which will be taken to recover the overrun and/or prevent its recurrence. The RPM will independently evaluate the reasons for the exceedence.

If the POL and BIA determine that the Management Action Report provides an adequate explanation and that appropriate action has been taken, the Management Action Report will be approved in writing and payment of the contractor's invoice shall be approved within five working days of receipt of the Management Action Report.

If the POL and BIA determine that the Management Action Report is not adequate, they shall immediately meet with the appropriate contractor(s) to agree upon appropriate action to be taken by the contractor(s). If an agreement cannot be reached within ten days, the matter will be submitted to arbitration and the contractor will not be paid until the matter is resolved. If arbitration becomes necessary, the POL and contractor will each appoint a disinterested party to serve as an arbitrator and they will agree upon a third arbitrator. The three arbitrators will hold an arbitration hearing within 30 days and the award and decisions of the majority of the arbitrators will be binding on all parties.

6.0 POL/LCC CONTRACT

6.1 Estimated Costs

The POL will contract with the LCC to perform the construction activities necessary to complete the reclamation of the site. The price of the construction work will be determined by the engineers' estimate prepared by the TAC upon completion of the engineering designs. The estimate prepared by the TAC will be comparable to the lowest reasonable bid that could be obtained from competitive bidding; however, allowances will be made for the special circumstances involved in the project. Specifically, allowances will be made for reduced productivity during the early stages of the project as members of the POL are trained, start-up costs for the LCC, and the reduced tax burden of the LCC. Change orders for increases or decreases in the price of fuel and for inflation after the first project year will be allowed. An escalation factor will be applied to all out-year work packages. The LCC, POL, and BIA will review the TAC estimate and adjustments will be made as necessary. The POL may require a check estimate or a complete independent estimate if necessary.

The POL/LCC contract will be a target contract with the TAC's estimate as the target price. The POL and LCC will share equally in any cost underruns and will share equally in any cost overruns, up to 50 percent of the LCC fee. The cost underruns or overruns will be calculated and paid annually based on the total cost and total estimate of the work packages completed during the year. The POL portion of any cost underruns will remain in the reclamation fund until the completion of the project.

A fee for all field and general and administrative costs will be incorporated into the estimate for all work packages and will be paid on a fixed-price basis. General and administrative costs will be paid at a percentage of all field costs.

Certain work packages, such as demolition, will be paid on a force-account basis. The LCC and RPM will agree on labor, equipment, and supplies needed for the work and the LCC will be paid on an actual cost basis, plus general and administrative costs, plus fee for all work ordered by the RPM. The RPM will maintain constant supervision over these activities.

The costs of the LCC prior to the start of construction and certain other tasks will be paid from the reclamation fund on an "at cost" basis. No fee will be allowed on these costs. These costs include items such as hiring start-up personnel, rehabilitating LCC home offices, and POL training.

6.2 LCC Financing

Two million dollars will be set aside from the reclamation fund

for capitalization of the LCC. The LCC may not spend this money, but it may be used to demonstrate financial capability to potential creditors. This money will be invested consistent with the approved investment plan for the reclamation project and may not be spent without the approval of the POL and BIA.

As previously discussed, the LCC will submit actual costs and actual production data by work package to the RPM monthly. The RPM will review the data and transmit a recommendation for payment to the POL. Five percent of all LCC invoices (including field costs, general and administrative costs, and fee) will be retained in the reclamation fund for a period of six months. If no claims are made against the work within six months, the retainage will be refunded to the LCC at the same rate at which it was retained. At the completion of all construction, all remaining monies will be refunded.

The LCC will provide a performance bond to the POL in an amount equal to the estimated cost of all authorized work packages which are not certified complete by the RPM.

7.0 FINANCIAL MANAGEMENT

7.1 Reclamation Funds

The POL will manage the investment of the reclamation fund with the oversight of the BIA as described in the POL/BIA contract for management of the Jackpile Project, Contract Number M00C1420. The funds will be maintained in an account which is separate from all other accounts of the POL and will be used solely for reclamation of the Jackpile Mine.

Upon completion of the construction, the POL will set aside $2,000,000 as a groundwater mitigation fund. This fund will be set apart from all other reclamation funds and will be used to provide additional backfill in the pits if the groundwater rises above the backfill level stated in the ROD. When, and if, water level monitoring demonstrates that the groundwater will not rise above the backfill level, the fund, or any portion remaining, will revert to the POL for any use it considers appropriate.

Upon the completion of construction, the POL will establish a $500,000 long term monitoring fund which will be set aside from all other reclamation funds. This fund and interest accruing thereon will be available to monitor the success of reclamation and to ensure that the reclamation effort withstands the test of time. Should any work be required to correct deficiencies in the work or to modify the reclamation, monies from this fund would be available for such mitigation.

Any portion of the reclamation fund remaining at the completion of construction (except those funds discussed above) will be released to the POL upon the verification by the POL and BIA that reclamation has been completed in accordance with designs and specifications.

7.2 Progress Payments

The POL will maintain an operating account from which it can make monthly progress payments to contractors. The RPM will provide estimates of monthly progress payments annually, or more frequently if requested, to assist the POL in maintaining appropriate funds in the operating account.

The RPM and LCC will submit certified invoices to the POL for all actual costs by the fifth day of the month for the work performed during the previous month. Upon approval of the monthly costs (as described in Section 6.0) by both the POL and BIA, disbursements will be made from the operating account of the POL to LCC as appropriate.

Allowances will be made in the TAC cost estimate for maintenance shop costs, major repairs and repair parts, and tire replacement.

The LCC will maintain the accounts necessary to pay for these expenses. The LCC's maintenance and repair accounts will not be large during the early stages of the project since the equipment will be under warranty and repair costs will be low. However, these accounts will be drawn down rapidly in the latter stages of the project as maintenance and repair costs increase. The monies in these accounts are needed for the completion of the project and only the LCC will have access to these accounts.

7.3 Accounting

The POL, RPM, and LCC are responsible for maintaining financial records in a professional and accurate manner so the records can be effectively audited by independent accountants utilizing generally accepted auditing standards and procedures. All financial records of the POL, and LCC will be maintained wholly separate from the financial records of the other project participants.

All financial records will, at all times, be consistent with the financial data submitted monthly for inclusions into the Monthly Project Status Report.

The POL, RPM, and LCC will retain the following records for a period of seven years:

- timesheets showing hours worked by each employee for each work package,
- approved purchase requisitions for each expenditure,
- purchase orders for each expenditure,
- receipts or invoices for each purchase, and
- canceled checks or transfer orders for each expenditure.

The POL will obtain an audit of all project financial records annually (or more frequently at the discretion of the POL) in accordance with the Office of Management and Budget circular A-128 "Audit Requirements for State and Local Government." The audit report will be provided to the BIA in a timely manner.

The POL and LCC will obtain appropriate worker's compensation, comprehensive liability, and automobile insurance for all of its employees in amounts approved by the POL and will indemnify the other project participants.

Any disagreements between the project participants concerning financial issues that do not involve a misrepresentation of facts will be submitted for arbitration. Involved project participants will each appoint a disinterested party to serve as an arbitrator

and they will agree upon a third arbitrator. The three arbitrators will hold an arbitration hearing within 30 days and the award and the decisions of the majority of the arbitrators will be binding on all parties.

7.4 Procurement

Purchasing

All equipment, supplies, and services leased or purchased with money from the reclamation fund must be used directly and solely for the Jackpile Project.

A purchase requisition must be prepared and approved by the appropriate organization prior to the purchase of any equipment, supplies, or services by any of the involved organizations. Each organization will utilize a separate purchase requisition approval system but all organizations will adhere to the following three requirements.

1. All individual purchases in excess of $50,000 will require POL and BIA approval.

2. All individual purchases in excess of $2,000 require the approval of the senior manager for the respective organization.

3. All equipment purchased solely for the project will become the property of the POL or LCC at the completion of the project.

The POL, RPM, and LCC will maintain separate property management systems and will separately track each piece of equipment with a purchase price of $2,000 or more.

The POL may, at its discretion, purchase the equipment, fuel, and other required supplies and services to take advantage of its tax-exempt status under the Indian Tax Status Act and the POL eligibility for the General Services Administration procurements. In that event, the POL may charge the project or project participant (as appropriate) an amount equal to the total costs to the POL.

Subcontracting

Potential specialty contractors for the project include contractors for blasting, underground entry abandonment, and water treatment and discharge. A decision on which project participant will perform and/or manage these activities will be made by the LCC. In general, if the LCC believes it has the ability to perform and/or manage these tasks then it will do so. If it does not have the required ability, the POL will assign the management of these tasks to the RPM and the RPM will subcontract the task.

All construction subcontracts in excess of $2,500 must have a performance bond supplied by the subcontractor. Preferential consideration will be given to companies owned by members of the Pueblo of Laguna consistent with the POL/BIA 638 contract and the policies of the POL.

All subcontracting for services in excess of $25,000 will follow an open and competitive bidding process and the LCC will select the bidder that best suits the project requirements. The LCC will solicit POL and BIA involvement in all aspects of the bidding process and the POL and BIA approval of the winning bidder will be obtained.

Subcontracting for services with a value of $5,000 to $25,000 will not require POL and BIA approval as long as the services are included in an approved work package and are obtained through an open and competitive process.

Subcontracting for services with a value of $5,000 or less may be performed at the discretion of the LCC.

Subcontracting for routine services such as fuel service, electrical power, major repairs of equipment. etc., will be performed by the LCC. The LCC will follow an open and competitive bidding process and will select the bidder that best suits the project requirements. The subcontracting for these routine services will not require POL or BIA approval.

7.5 Change Orders

The RPM will maintain a budget log for all change orders and will report the status of all change orders monthly. The RPM may approve change orders which do not exceed $50,000 individually or which in sum do not exceed $400,000 annually. The POL and BIA must approve change orders which exceed these thresholds.

8.0 ADMINISTRATIVE CONTROLS

8.1 Controls

Because of the special nature of the project whereby the POL is the owner of the site, the work, and the construction contractor, it is considered prudent to establish certain administrative controls. Therefore, the following requirements will be in effect as long as the LCC is performing construction on the project.

The LCC will operate as an independent company with a board of directors (board) and president directing the company. The board and president will hire and discharge (as necessary) all LCC personnel, and the POL will not be involved in the personnel matters of the LCC other than to establish policies for hiring and training members of the POL and for selecting board members and the president.

The LCC board members will have staggered terms of office. Board members may succeed themselves. The POL will select LCC board members but will not replace board members more frequently than one per year. In the event of the resignation of a board member within one year of the appointment of a board member, the POL will select a board member from a list of three candidates provided by the board. The POL will select the RPM and the LCC will not be involved in the selection.

The BIA will approve the selection of all LCC board members, the LCC President and general manager and the RPM.

All POL activities concerning the project will be administered by and through the RPM. All POL activities concerning the operation of the LCC will be directed by the Governor and Tribal Council to the LCC board and president. All work performed by the LCC on projects other than the Jackpile Project will be wholly separate from the Jackpile Project and the completion of the Jackpile Project will take precedence over the completion of other projects.

The procedures and requirements described in this plan apply only to the Jackpile project.

9.0 PROJECT PLANS

9.1 Introduction

Seven project plans were prepared by the TAC's on key aspects of the project. Each of these plans were submitted for POL and BIA approval and are described below.

9.2 Environmental Monitoring Plan

The Environmental Monitoring Plan is critical to the project as it documents the success of reclamation activities and the imoacts of reclamation on the environment and the public. The plan is also important because environmental monitoring is very expensive and the POL needs to implement a cost-effective monitoring program.

The Environmental Monitoring Plan is designed to document any major impacts which occur during construction and to monitor the long-term effectiveness of the reclamation process. The plan is also integrated with the Health and Safety Plan to provide essential data for the protection of workers during reclamation.

The basis for the development of this plan is the EIS and the ROD. Key environmental parameters to be monitored are:

- groundwater quality and elevation,
- surface water quality,
- air quality outside and inside salvageable buildings,
- vegetation toxicity,
- subsidence,
- ground vibrations, and
- revegetation success.

A complete review will be made of the existing monitoring program and the associated database. Specific baseline monitoring activities will be added or modified as needed to meet the needs of the project. The monitoring program will be compared to existing programs for similar projects. Monitoring programs established by the U.S. Department of Energy, U.S. Nuclear Regulatory Commission, and U.S. Environmental Protection Agency are used as a reference for the Jackpile Project.

Post-reclamation monitoring is designed to verify that project goals have been achieved, and to provide timely information for initiation of any maintenance required to repair and preserve the long-term integrity of the reclaimed site.

Particular attention will be given to the monitoring of groundwater recovery levels, build-up of salts in the pits, and the uptake of potentially harmful contaminants by vegetation.

The Environmental Monitoring Plan thoroughly addresses all parameters to be measured (i.e., locations and frequency, reporting requirements). Draft and final plans were submitted for POL and BIA review and approval.

9.3 Health and Safety Plan

The Jackpile Project requires extensive use of major earth-moving equipment as well as the safe handling of low-level radioactive materials. The risk from accidents, injuries, and exposure to radiation requires the preparation of a comprehensive Health and Safety Plan. The plan complies with the Occupational Health and Safety Act (29 CFR 1910). The plan includes requirements for supervision, site control, hazard evaluation, personnel training, safety procedures, decontamination protocols, reporting/auditing, and emergency response procedures specific to the Jackpile Project.

Since the site contains radioactive materials, a radiation dosimetry program has been established to document worker exposure. This program uses thermoluminescent dosimeters (TLDs) to measure penetrating whole-body radiation to workers. If results indicate minimal exposure, this program may be terminated at the discretion of the POL and BIA. However, a full year of radiation data is necessary to document exposure levels and to protect the POL and LCC from potential lawsuits.

All radiation protection procedures and requirements are established in accordance with the "as low as reasonably achievable" (ALARA) principle recommended by the International Commission on Radiological Protection.

The Health and Safety Plan also contains a description of potential safety hazards associated with the site and accident protection procedures to be followed during construction. It will address such issues as working underground, building trenches, working near highwalls, fire safety, health and safety training, asbestos removal, heavy equipment operations, traffic safety, and emergency response. Responsibilities and procedures for implementing the plan will also be incorporated.

9.4 Regulatory Compliance Plan

Various permits, licenses, and approvals will be required for the activities involved in the reclamation of the site. These permits, licenses, and approvals must be obtained in a timely manner to assure compliance with applicable laws and regulations and to avoid the delay of reclamation operations.

The development of a Regulatory Compliance Plan requires consultation with Federal, Tribal, and local agencies to identify the applicable permits. Once applicable requirements are identified, detailed procedures for preparing permit applications for agency review and for approval processes will be obtained. This will include identification of the principal personnel at the regulatory agencies, the roles of the lead and cooperating agencies in the permitting process, the time tables for obtaining the various permits, and any special consideration involved in the permitting process. All pertinent information will be compiled for each required permit and entered into the Regulatory Compliance Plan. The information is used to develop a regulatory compliance schedule for project planning purposes. The plan facilitates the preparation and submittal of permit applications so that approvals will be received in a timely manner to avoid delaying reclamation operations. The Regulatory Compliance Plan will be updated as necessary to incorporate additional permits that may be required by modification of reclamation operations.

The plan also identifies public information policies and procedures for use by the POL in regulating access to the site and disseminating project information.

9.5 Inspection Plan

The Inspection Plan identifies the specific requirements and criteria which must be satisfied during and subsequent to reclamation activities. These requirements and criteria were identified through review of applicable Federal and local standards, and through consultation with appropriate POL and BIA personnel. Based on the results of these reviews and consultations, a project-specific inspection plan was prepared in draft form. The plan defined the observations, tests and inspection activities that are used to ensure that the reclamation meets all design criteria, plans, and specifications. Also included in the Inspection Plan are the definitions of the responsibilities, authorities, and required qualification levels of inspection personnel. Reporting requirements such as daily summaries and monthly reports, inspection data sheets, problem identification and corrective measures reports, acceptance reports, and closure documentation are also be addressed. The inspection plan includes requirements for the preparation of a closure plan at the completion of construction activities. All inspection plans and procedures are to be periodically reviewed and revised to reflect changes or modifications to reclamation operations. All revised plans and procedures will be subject to the same review and approval process as the original documents.

9.6 Final Waste Pile Slope Design

This report addresses general waste pile slope design criteria to be applied generally across the site except for five specific

areas that are identified as special cases. The special cases are covered in the Special Case Designs, section 9.7

Basic changes to the original design include:

- o the use of terraces on 3h:1v slopes,
- o the use of some angle-of-repose slopes with benches,
- o minimization of disturbance to previous reclaimed areas, and
- o major modifications to the top dressing/revegetation specifications. this is covered in section 9.8, Soils and Vegetation Evaluation for Final Reclamation.

9.7 Special Case Designs

The Final Waste Pile Slope Design identified design criteria for general application across the site. This design involves the primary application of the general slope design criteria with some site specific modifications to the following:

- o Stabilization of the Rio Moquino and adjacent waste piles,
- o Jackpile waste pile JP-WO-03,
- o Jackpile waste pile JP-WS-19,and
- o Gavilan Mesa waste pile JP-WS-01.

The following involves increased stability using a vegetative approach:

- o Oak Canyon waste pile SP-WS-06

The details of vegetative stability are described further in section 9.8, Soils and Vegetation Evaluation for Final Reclamation.

9.8 Soils and Vegetation Evaluation for Final Reclamation

The erosional stability of final reclamation is primarily dependent upon the successful control of surface runoff and the establishment of sufficient vegetation. This report presents the top dressing and revegetation techniques to improve reclamation success. The areas covered by this report include the following:

- o topsoil survey,
- o vegetation survey,
- o interseeding trials, and

- revised revegetation specifications.

10.0 PROJECT STATUS REPORT SYSTEM DESCRIPTION

10.1 Introduction

The Project Status Report (PSR) Program for the Jackpile Project is a comprehensive computer generated system of tracking project expenditures and monitoring actual costs and progress. The PSR Program provides accurate and detailed monitoring of all project costs. The program requires managers to thoroughly document all costs and provides the data necessary to analyze overruns in a timely manner. In addition, the system also requires managers to control costs and to explain and correct cost overruns, schedule delays, and inefficient operations.

The RPM will operate the PSR Program and will provide monthly reports of actual costs, actual value of the work performed, as well as cost variances for each work package, each major grouping of work packages, and the project as a whole.

Actual Costs

Actual costs will be obtained from the accounting system each month (LCC). Actual schedule progress will be obtained from percent complete estimates and production calculations. From this percent complete data, actual value will be derived and variances will be calculated.

The monthly actual cost and schedule data will be entered into the system and a comparison will be made against baseline cost and schedule data at the work package level. Baseline costs and schedule will be obtained from the original approved cost estimates for each work package with an escalation factor applied for out-year budgeting purposes. The escalation factors will be consistent with industry standards.

The PSR Program will focus on the work package level. This is the level at which budgets are generated and actual costs are incurred. A work package will be generated for a work assignment in which actual progress can be measured and costs tracked. A discrete budget for the work package will be generated.

The work package is the lowest level at which costs will be both budgeted and incurred. The next level at which costs will be tracked is the "Sum of the Work Package" (e.g., backfilling). At this level, the sum of the all work package costs can be reported and measured against baseline data. The "task level" is the highest reporting level below the major task, and is designed to differentiate costs between contractors for summary reporting purposes. The major task (e.g., construction) is the highest level at which costs will be reported and is designed to differentiate between construction costs and management costs.

Schedule

The project schedule will also be based upon the work package. The schedule for each work package will ensure control at the same level at which costs are incurred.

Upon approval of the project year schedule, a project year baseline schedule will be generated. This schedule will include all data down to the work package level. Monthly progress will then be generated from input by the field supervisors. This schedule. known as the working schedule, will then be measured against the baseline schedule and monthly, progress reports will then be generated.

Percent Complete

Percent complete production data will be generated by the field supervisors each month and audited/adjusted each quarter for accuracy. This production control calculation will then be quantified and termed "percent complete."

Percent complete will then be compared to both the baseline schedule and the actual costs. This comparison/calculation is termed "variance.

Change Control and Reporting

A change control report will be used to monitor change requests. This report will provide an easy means of implementing complete traceability of all change orders and a centralized location for all change order cost and schedule data. The change control report will be updated and maintained in a monthly cycle with all other cost performance reporting data.

Following the monthly cost performance cycle, costs, schedule, and percent complete data will be provided to the RPM by the LCC. This data will be input into the report and monthly cost performance reports will then be generated.

The following reports will be generated on a monthly basis for current period, yearly (cumulative), and lifecycle cost performance data:

(1) cost performance/progress

(2) 4 week projected schedule

(3) variance analysis reporting

(4) financial reporting (reclamation funds)

(5) change control report

10.2 Responsibilities

The responsibilities of the project participants are described below.

LCC

Monitor and report actual LCC costs by work package by the fifth working day of each month for the preceding month's costs.

Maintain and report LCC production data by work package by the fifth working day of each month for the preceding month's progress.

RPM

Operate the PSR Program.

Enter LCC and POL cost and production data into the PSR Program.

Prepare and analyze the PSR reports for inclusion in the Monthly Progress Status Report.

10.3 Project Status Report System

The Project Status Report system will be focused at the work package level (level IV). Each work package will be planned and baselined with its own discrete budget and schedule. In doing so, fiscal management can take place at the same level at which all costs are incurred. This will also give managers the ability to control and maintain costs at the level at which work is progressing at the site.

The Annual Operating Plan will be incorporated into the Project Status Report system and maintained as the working schedule for that particular project year. The baseline and working cost and schedule data will then be used to measure actual costs and percent complete. The annual budget and schedule will remain constant throughout each project year and can only be changed with implementation of an approved change order.

The work breakdown structure (WBS) code has been designed to facilitate the cost control and reporting system. All cost data which is reported at the work package level can be summarized, reported, and traced at one of five levels. The following breakdown shows the levels at which all costs will be tracked:

(1) Level V: Resource

All costs can be summarized and reported against, for any work

package (additional cost information can be traced upon request).

(2) Level IV: Work package

All elements of the cost data (resource) can be reported against any work package which is in progress.

(3) Level III: Summary work package

All cost data can be summarized at this level, which would combine all work package costs (e.g. backfilling).

(4) Level II: task

Task level reporting will combine and sort data by given site area. This report will be used to forecast summary-level trends as well as to estimate at completion costs at the project level.

(5) Level I: Major Task

This the highest level for reporting, and will be used to differentiate between construction and non-construction costs. Total project management costs will be distinguishable from the construction costs.

Also included in the work breakdown structure code are two alpha characters which represent (1) task code and (2) work package code. The task 1-digit alpha character will represent the first letter of the task while the alpha character in the work package section in the code represents the major area of site work (or level of effort).

As mentioned above, the first digit of the work package section of the WBS code is an alphabetic character. This will also help distinguish site-specific versus the level of effort work. All level of effort work package codes will begin with the letter "L". This feature will also ensure ease of use on timesheets, as well as for accounting key-punch entry.

A level of effort (LOE) account is defined as a management account in which work cannot be traced to a specific work package; instead it supports all ongoing site work and management of this work. From a performance measurement standpoint, each LOE account has a discrete project year budget which is loaded linearly across a given year. The percent complete of an account such as this is equal to the budget.

10.4 Percent Complete

Percent complete estimates for all earthwork work packages will be calculated by dividing the quantity placed by the total estimated quantities to be placed under the respective work package.

Percent complete estimates for earthwork work packages may not be based on costs, labor hours, or schedule.

Percent complete estimates for all LOE work packages will be calculated by dividing the number of labor hours spent by the total estimated amount to be spent under the respective work package.

Percent complete estimates for all LOE work packages will be reported as 8.33 percent each month. An example of an LOE package is the Health and Safety Program.

A cost variance (CV) is a calculation which subtracts the budget (both period and cumulative-to-date) from the actual value. In layman's terms, it compares what was budgeted to what was accomplished in a given period.

Variance analysis will be reported each month. This analysis will be done on cost variances which exceed thresholds. These thresholds, which must be implemented into the performance measurement system, will be automated to flag variances when they meet or exceed given thresholds. Thresholds will exist for current period, cumulative, and at-completion variances. Each of these thresholds will include both a percentage and total dollar amount of the account in concern. When a threshold is exceeded, an Management Action Report will be issued by the LCC to the RPM. The RPM will then include the Management Action Report with all other monthly cost performance reports.

As mentioned above, an At-Completion Variance (ACV) will also be calculated in the Project Status Report (PSR). This is done with a calculation which compares Estimate-At-Completion (EAC) cost data to the Budget-At-Completion (BAC) data.

10.5 Change Control

The change control system is an integral process within the Jackpile Project Status Report. The need for a method to control unanticipated and unbudgeted work is crucial. This process, which will budget and schedule all change control costs, will maintain fiscal management and complete traceability throughout the life of the project.

The process referred to above is accomplished through the Change Control Report. This report will provide budget and schedule management as well as complete traceability for all change orders.

The second key aspect of the change control report is the traceability of the report system. As change orders are approved and implemented, the Change Control Report will be used to trace the type, schedule, budget, approval date, and other key information necessary to manage all change orders.

The third key aspect of this system is the implementation of the change order into the cost/schedule system. The major change order process requires the preparation of a new work package. This work package will be tracked in the project status report with its own discrete budget and schedule. In doing so, progress and fiscal management can be maintained for large field change orders. The minor change orders will not require the preparation of an additional work package. Instead, the schedule and budget will be assigned to an existing work package which most closely resembles the approved change order. For example, a change order to repair the damage done to a partially reclaimed slope will be assigned to the work package which includes recontouring that slope.

APPENDIX A

DEFINITIONS OF ACRONYMS

AOP	Annual Operating Plan: A plan prepared each year which establishes budget and schedules for the following year.
BIA	U.S. Bureau of Indian Affairs
CMC	Construction Management Contractor
CO	Contracting Officer, BIA
COR	Contracting Officer's Representative, BIA
C&SC	Cost and Schedule Control Program: A computer assisted program used to track and assess project progress.
DOI	U.S. Department of the Interior
EIS	Environmental Impact Statement
LCC	Laguna Construction Company
LOE	Level of Effort: Refers to tasks that have no or few deliverables or milestones and are paid based on schedule not production.
PMP	Project Management Plan
POL	Pueblo of Laguna
ROD	Record of Decision:
RPM	Reclamation Project Manager, POL
TAC	Technical Assistance Contractor
WBS	Work Breakdown Structure A management tool used to categorize the work.